```
from sklearn.datasets import load_diabetes
data = load_diabetes()
```

```
print(data.DESCR)
```

```
.. _diabetes_dataset:

Diabetes dataset
----------------

Ten baseline variables, age, sex, body mass index, average blood
pressure, and six blood serum measurements were obtained for each of n =
442 diabetes patients, as well as the response of interest, a
quantitative measure of disease progression one year after baseline.

**Data Set Characteristics:**

  :Number of Instances: 442

  :Number of Attributes: First 10 columns are numeric predictive values

  :Target: Column 11 is a quantitative measure of disease progression one year after baselir

  :Attribute Information:
      - age     age in years
      - sex
      - bmi     body mass index
      - bp      average blood pressure
      - s1      tc, total serum cholesterol
      - s2      ldl, low-density lipoproteins
      - s3      hdl, high-density lipoproteins
      - s4      tch, total cholesterol / HDL
      - s5      ltg, possibly log of serum triglycerides level
      - s6      glu, blood sugar level

Note: Each of these 10 feature variables have been mean centered and scaled by the standard

Source URL:
https://www4.stat.ncsu.edu/~boos/var.select/diabetes.html

For more information see:
Bradley Efron, Trevor Hastie, Iain Johnstone and Robert Tibshirani (2004) "Least Angle Regre
(https://web.stanford.edu/~hastie/Papers/LARS/LeastAngle_2002.pdf)
```

```
x = data.data
y = data.target
```

```
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x, y, test_size=0.2)
```

```
from sklearn.linear_model import Ridge
r = Ridge(alpha = 0.0001)
```

```
r.fit(x_train,y_train)
```

```
Ridge
Ridge(alpha=0.0001)
```

```
y_pred = r.predict(x_test)
```

```
from sklearn.metrics import mean_squared_error, r2_score
import numpy as np

rmse = np.sqrt(mean_squared_error(y_test, y_pred))
r2 = r2_score(y_test, y_pred)

print("RMSE:", rmse)
print("R2 Score:", r2)
```

```
RMSE: 53.953806860863224
R2 Score: 0.4693576165297858
```